

REMARKS

The application has been reviewed in light of the Office Action dated January 7, 2005. Claims 12-23 are pending, with claims 12-14 being in independent form. Claims 1-11 were previously canceled, without prejudice or disclaimer. By this Amendment, claims 12-14 have been amended to clarify the claimed invention, and claims 16-20 and 23 have been amended to place the claims in better form for examination by removing informalities therein and without narrowing the scope of the claims. Support for the amendments to claims 12-14 can be found in the application at, for example, page 39, lines 7-11.

The January 7, 2005 Office Action states that the Information Disclosure Statement (IDS), including Form PTO-1449 annexed thereto, filed concurrently with this application on April 22, 2004 has not been considered by the Examiner because the IDS is purportedly not compliant with 37 C.F.R. §1.98(a)(2).

As pointed out in the IDS filed on April 22, 2004, (i) this application is a Rule 1.53(b) continuation of prior application Serial No. 10/175,181 filed June 19, 2002 (now U.S. Patent No. 6,764,174 issued July 20, 2004), and relies upon said prior application for an earlier filing date under 35 U.S.C. §120, and (ii) all of the references cited in the April 22, 2004 IDS were submitted to, or cited by, the U.S. Patent and Trademark Office in prior application U.S. Serial No. 10/175,181. Therefore, Applicant submits that the April 22, 2004 IDS meets the requirements of 37 C.F.R. §1.98(d), and that copies of the references cited in the April 22, 2004 IDS do not need to be submitted.

Further, according to the August 5, 2003 OG Notice published by the Patent and Trademark Office, the Office has waived the requirement under 37 C.F.R. §1.98(a)(2)(i) for submitting a copy of each cited U.S. patent and each cited U.S. patent application publication for all U.S. national patent applications filed after June 30, 2003 and for all international application

that have entered the national stage under 35 U.S.C. §371 after June 30, 2003. Since this application was filed after June 30, 2003, copies of each cited U.S. patent and each cited U.S. patent application publication are not required.

In order to ensure consideration of the references cited in the April 22, 2004 IDS, copies of the references listed on the Form PTO-1449 annexed to the IDS, that are not a U.S. patent or U.S. patent application publication are submitted herewith.

Accordingly, Applicant requests that the Examiner consider the references cited in the Information Disclosure Statement filed on April 22, 2004, and place the Examiner's initials next to each reference entry on the Form PTO-1449 annexed to the IDS to indicate that the corresponding reference has been considered by the Examiner.

Claims 16-20 and 23 were objected to as purportedly having informalities.

By this Amendment, claims 16-20 and 23 have been amended.

Accordingly, withdrawal of the objection to claims 16-20 and 23 is respectfully requested.

Claims 12-16, 21 and 22 were rejected under the judicially created doctrine of obviousness-type double patenting as purportedly unpatentable over claims 1, 2, 4 and 6 of U.S. Patent No. 6,764,174.

A Terminal Disclaimer is attached as **Exhibit A** hereto, thus obviating the double patenting rejection. A check covering the \$130.00 statutory disclaimer fee is enclosed herewith.

Withdrawal of the double patenting rejection is requested.

Claims 12-17 were rejected under 35 U.S.C. §102(e) as allegedly purportedly anticipated by U.S. Patent No. 6,428,160 to Roy et al. Claims 21-23 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Roy in view of U.S. Patent No. 6,523,948 to Matsumoto et al.

Applicant has carefully considered the Office Action and the cited art, and respectfully submits that independent claims 12-14, as amended, are patentable over the cited art, for at least

the following reasons.

This application relates to ink-jet recording in which non-contact heating of a printed surface of a recording medium is applied to make ink adhere to the printed surface. In contrast to conventional-type ink-jet recording devices which use contact heating, non-contact heating according to this application prevents an image printed on the recording medium thereby from degrading (caused by contact therewith) before the image has dried sufficiently. Accordingly, high quality recording can be achieved.

For example, independent claim 12 is directed to an ink-jet recording device comprising a multi-nozzle recording head and a recording medium heating unit. The multi-nozzle recording head has nozzles, through which ink is fired on to a fine-powder coated recording medium. The recording medium heating unit heats a printed surface of the recording medium without contacting the printed surface of the recording medium, and the heating unit extends along a direction along which the nozzles of said recording head are arranged, and has a heating range, the width of which is wider than the width of a printing range of the recording medium. Since the ink-jet recording device covers a wider range than the width of a printing range of the fine-powder coated recording medium, high speed, high definition, quality printing and copying can be achieved.

The cited art does not disclose or suggest such an ink-jet recording device having the above-mentioned advantages.

Roy, as understood by Applicant, is directed to ink-jet printing techniques wherein slow-drying ink drops are jetted onto paper, and prior to ink penetration into the paper, the water in the droplet is evaporated while still resident on the paper surface.

Applicant does not find teaching or suggestion in Roy, however, that the ink-jet printing techniques may be adapted for ink-jet printing onto a fine-powder coated recording medium, as

provided by the claimed invention of claim 12 as amended.

Matsumoto, as understood by Applicant, is directed to an ink jet printer which comprises an ink jet head and a thermal head. Plural nozzles are arranged in the ink jet head in an array in a main scan direction. The thermal head includes plural thermal elements arranged in an array in the main scan direction for applying heat to the recording material. Matsumoto was cited in the Office Action as purportedly disclosing an optical LED heater.

Applicant does not find disclosure or suggestion by the cited art, however, of an ink-jet recording device comprising a multi-nozzle recording head and a recording medium heating unit, wherein the multi-nozzle recording head has nozzles, through which ink is fired on to a fine-powder coated recording medium, and the recording medium heating unit heats a printed surface of the recording medium without contacting the printed surface of the recording medium, and extends along a direction along which the nozzles of said recording head are arranged, and has a heating range, the width of which is wider than the width of a printing range of the recording medium, as provided by amended claim 12.

Since the cited art does not disclose or suggest each and every feature of the claimed invention, the cited art does not render the claimed invention unpatentable.


Independent claims 13 and 14 are patentably distinct from the cited art for at least similar reasons.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Office is hereby authorized to charge any fees that may be required in connection with this response and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone conference could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Allowance of the subject application is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Paul Teng", is written over a horizontal line.

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